

## Appendix D

### MANURE INFORMATION for 590 NUTRIENT MANAGEMENT PLANNING PART I *Manure quantity estimation*

Name: \_\_\_\_\_ Date: \_\_\_\_\_

ANIMAL	SIZE	Daily Manure Production To Apply				Number of Head	Daily Per Animal	Daily Total Tons or Gal.	365 Day Total	% Collected	Total Collected
		Solid		Liquid							
	lbs	lbs/day	ft <sup>3</sup> /day	ft <sup>3</sup> /day	gal/day						
<b>Dairy</b>											
Calf	150	13	0.20	.37	2.80*						
Calf	250	21	0.32	.60	4.50*						
Heifer	750	65	1.0	1.85	13.80*						
Lact. Cows	1000	106	1.7	3.08	23.00*						
	1400	148	2.4	4.28	32.00*						
Dry Cows	1000	82	1.3	2.41	18.00*						
	1400	115	1.82	3.35	25.00*						
<b>Beef</b>											
Calf	450	26	0.42	1.36	9.80*						
High Forage	750	62	1.0	3.60	26.00*						
High Forage	1100	92	1.4	4.84	35.00*						
High Energy	750	54	0.87	2.70	19.50*						
High Energy	1100	80	1.26	4.22	30.50*						
Beef Cow		63	1.00	3.32	24.00*						
<b>Swine</b>											
Nursery Pig	25	2.7	0.04	0.04	0.30						
Grow-Finish Pig	150	9.5	0.15	0.17	1.20						
Gestating Sow	275	7.5	0.12	0.14	1.00						
Sow & Litter	375	22.5	0.36	0.42	3.00						
Boar	350	7.2	0.12	0.14	1.00						
<b>Poultry    Other</b>											
Layers	4	0.26	0.004	0.004	0.03						
Broilers	2	0.18	0.003	0.003	0.02						
Turkeys	20	0.90	0.014	0.015	0.11						
Duck	6	0.33	0.005	0.006	0.04						
Sheep	100	4	0.060	0.055	0.40						
Horse	1000	50	0.80	0.827	5.98						

Source: Midwest Plan Service publication number MWPS-18 "Manure Characteristics" Section 1, copyright 2000. Solid volumes are as excreted. \*The liquid dairy and beef values are computed from the MWPS daily production and have approximately equal nutrient values annually as solid manure. MWPS liquid dairy and beef factors are multiplied by 1.8 and 3.2 respectively. Dilution on your operation maybe substantially different. **Use manure analysis and manure storage volumes** to determine manure production whenever possible.

Manure quantities are likely to be more accurate estimated from storage size:

What is the manure storage pit size? \_\_\_\_\_ gallons or tons?

Multiply pit size x Number of times emptied/yr? \_\_\_\_\_ = Total annual manure collection